

Michelle S. Runyon. Bills, Bills, Bills: An Investigation of How Libraries and Archives Seek Disaster Recovery Funding. A Master's Paper for the M.S. in L.S degree. April 2020. 36 pages. Advisor: Mary Grace Flaherty.

This project sought to understand how staff at libraries and archives find and select funding opportunities to apply for following a natural disaster. This topic was investigated by deploying a survey to staff members at libraries and archives affected by natural disasters in the past five years. The survey consisted of questions about what sources of funding those libraries and archives pursued and why they pursued them. The survey was administered through Qualtrics and potential participants were asked to participate via notices posted to professional listservs. The results were analyzed with Microsoft Excel. The findings of this study will likely have implications for how library and archival institutions apply for disaster recovery funding as well as how grant giving institutions advertise their funding opportunities.

Headings:

Disasters

Emergency management

Academic libraries—United States

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Surveys

BILLS, BILLS, BILLS: AN INVESTIGATION OF HOW LIBRARIES AND  
ARCHIVES SEEK DISASTER RECOVERY FUNDING

by

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## Introduction

In recent years, the field of cultural heritage preservation has begun to systematically examine disaster mitigation and recovery. Literature in the field examines specific preservation concerns, such as how to treat moldy paper, and the importance of creating disaster plans for individual institutions. The library and archival professions have also refined statistics that track how often natural disasters affect libraries and archives and to what extent. However, one aspect of disaster recovery that has not been discussed in research contexts is how cultural heritage institutions obtain disaster relief funding. In this study, I examined how library and archival institutions choose which grants and other funding opportunities to pursue following the aftermath of a natural disaster. I investigated this topic by administering a survey to library and archive staff members whose institutions experienced a natural disaster. The survey consisted of questions regarding internal versus external funding opportunities as well as how funding received addressed the recovery needs of the institution.

## Literature Review

As long as natural disasters have impacted human society, there has been a need for disaster planning and recovery. In 2004, the first comprehensive study of preservation concerns for libraries and archives was completed; the Heritage Health Index addressed everything from what types of rare materials libraries and archives had to how many

cultural heritage institutions had disaster plans. One of the most notable findings of the report was that eighty percent of collecting institutions did not have codified, written disaster policies; most of these institutions were museums (Heritage Preservation, 2005a).

The updated Heritage Health Information Survey conducted in 2014 by the Institute of Museum and Library Services (IMLS) found that more collecting institutions had disaster plans (forty-two percent as opposed to twenty percent in the 2004 Heritage Health Index)(Institute of Museum and Library Services, 2019).

Following a natural disaster, when it is safe to do so, libraries and archives staff will commonly assess damage sustained by collections or facilities to see the extent to which they were damaged. At this time, staff members may choose to consult with onsite conservation staff or reach out to a conservator offsite to solicit advice on how to proceed with recovery and salvage efforts. One resource that library and archival institutions can look to for guidance on how to proceed in their recovery efforts is the Heritage Emergency National Task Force. The Heritage Emergency National Task Force is a collaboration between 42 separate government and non-profit organizations dedicated to the preservation of cultural heritage materials endangered by natural and man-made disasters. Member organizations include the Federal Emergency Management Agency (FEMA) and the Smithsonian Institution. The National Heritage Responders provide free assistance to those who are suffering from a natural disaster. Cultural heritage institution staff members can call into the National Heritage Responders' phone help line or email and receive advice on how to proceed with recovery efforts or a referral to a relevant

contractor to provide recovery services. National Heritage Responders can also deploy to sites of major disasters and assist affected cultural heritage institutions (*National Heritage Responders*, n.d.). The Northeast Document Conservation Center also has a free 24/7 hotline that provides free disaster recovery guidance. Tara Kennedy, National Heritage Responder and Preservation Services Librarian at Yale University, recommends vetting companies by asking them to supply references from institutions they have worked with in the past. She further recommends seeing if services can be provided onsite, without needing ship damaged materials to another location, and if not to tour the facility where the work will be completed. Kennedy further recommends investigating what services various companies can provide and if one company can handle the institution's recovery needs or if multiple contractors will need to be hired to complete the work (Kennedy, 2017).

One glaring gap in current professional literature is how to work with insurance companies in the aftermath of a natural disaster. Libraries and archives may have varying levels of insurance coverage that could cover damage done to holdings, but not facilities damage or not cover damages done by specific natural events such as floods or earthquakes. Insurance policies may cover an individual library or archive or they could encompass several under the umbrella of a parent institution such as a single university which may cover many libraries or archives that are a part of the university (Mary Grace Flaherty, personal communication, September 30, 2019). Misunderstandings about insurance coverage can lead to a lengthy recovery process, with legal disputes between libraries and their insurance provider (Corrigan, 2008; Diamond, 2006). Unsurprisingly,

library and archival professionals may wish to learn more about how to work with their insurance provider (Carnes, 2018a, 2018b).

#### Grants/External Funding for Disaster Preparedness and Recovery

It is common in the library and archival professions to seek both internal and external funding to undertake new projects, improve ongoing services, or preserve existing holdings. Grant funding supplements the budgets of libraries and archives and do not need to be paid back, unlike a loan (Staines, 2010). Librarians and archivists alike will encounter the need to apply for grants throughout their careers. Although this is a central part of these professions, few librarians and archivists receive training within their master's degree programs in how to write grant applications/obtain funding. Librarians and archivists more commonly learn how to write grant applications through professional development opportunities offered by professional organizations or through professional literature on the topic.

For academic libraries, grants must be reviewed by college-wide departments in charge of research compliance. These departments must determine if the college or university can meet the conditions of the grant. A grant constitutes a contract between the grant giving and receiving institutions to uphold certain expectations. These expectations can include cost share, how much the receiving institution is supposed to contribute to the grant project financially or by other metrics such as volunteer hours (Arlitsch, 2013).

When deciding what disaster recovery funding options to pursue, librarians and archivists may turn to a list of resources compiled by professional organizations or colleagues to find suitable funding opportunities. These guides can include information

about eligibility criteria and range of funds offered alongside tips on how to conduct salvage and early recovery efforts. In a funding guide distributed in September 2005, in the aftermath of Hurricane Katrina, Heritage Preservation lists various funding opportunities both from the federal government and relevant non-profit organizations along with background about each grant, how to apply for them, and how much can be awarded from each type of grant. An annotated set of resources lists some resources to navigate funding alongside other disaster recovery resources (*Annotated Resources*, 2011; Heritage Preservation, 2005b). There are government and non-profit organizations that provide funding to libraries and archives in the wake of a natural disaster. They include, but are not limited to, the Federal Emergency Management Agency (FEMA), the Institute of Museum and Library Services (IMLS), the Andrew W. Mellon Foundation, the Society of American Archivists (SAA), and the American Libraries Association (ALA). The funding offered by these organizations can be directly for disaster relief purposes or, more commonly, are designated for preservation purposes and can be applied to disaster preparedness or relief efforts. The funds available at different nonprofits can vary greatly. Government and non-profit partnerships are common as well where staff from many institutions coordinate assistance for cultural heritage organizations.

### Impacts of Recent Natural Disasters on Libraries and Archives

Disaster recovery is aided by an institution having a comprehensive disaster plan that staff can refer to when responding to the disaster. When the School of Medicine Library at University of South Carolina decided it needed to create a disaster



management policy, they began by hiring consultants to provide recommendations and guide their decision-making process. The staff began by doing a preservation assessment of their holdings and identifying hazards for different areas of their facilities. Staff members also identified key services to maintain library patrons in the event of a disaster and establish communication procedures in an emergency situation. They found it could be difficult to get staff to buy into new disaster plans, but it is essential to assign roles to staff members ahead of time to facilitate response and ensure compliance with the policy (Yeh et al., 2010). Frances Wilkinson also emphasized the need to cultivate members of a library Disaster Response Assistance Team (DRAT) who have high emotional intelligence in order to build team cohesion that are adaptable and capable to take on unforeseen circumstances that could arise in a disaster situation (Wilkinson, 2015).

Several natural disasters in the twenty-first century prompted the library and archival professions to re-examine disaster preparedness. Hurricane Katrina in 2005 was particularly significant for both professional communities. Many small, regional college and university libraries lost the majority of their holdings in the aftermath of Katrina largely due to water damage. Additionally, recovery was made more difficult by the fact that phone and internet networks were non-functional in the immediate aftermath of Hurricane Katrina hitting New Orleans (Corrigan, 2008, p. 294). The disaster plan in place for the Howard-Tilton Memorial Library, Tulane's main library, failed to account for many of the circumstances that arose from Katrina and staff were forced to strategize their response to the crisis in real-time (Corrigan, 2008, pp. 295–300; Diamond, 2006). Many libraries struggled with restoring services and long-term financial difficulties, in

part because of ongoing disputes with insurance providers and FEMA. Staff from Tulane University's libraries have been particularly vocal about how liability was unclear and led to prolonged debates with their insurance provider about what recovery efforts would be covered by their policy (Nevins & Nyberg, 2006; Topper, 2011). With funds from the Bill & Melinda Gates Foundation, the Gulf Coast Libraries Project began to work with public libraries in Louisiana and Mississippi to bring back library services and rebuild library facilities. The Andrew W. Mellon Foundation funded the Academic Libraries Hurricane Recovery Project, which worked with individual academic libraries to acquire new holdings and restore services to their campus communities. Additionally, both projects funded professional development efforts for library staff to learn more about relevant preservation techniques and develop more comprehensive disaster plans (Corrigan, 2008; Nevins & Nyberg, 2006; Topper, 2011). The Institute of Museum and Library Services (IMLS) also provided \$1.5 million in grants for libraries and museums impacted by major natural disasters in 2006 (American Libraries, 2006).

Hurricane Maria in 2017 similarly forced cultural heritage professionals to rethink their approaches to disaster planning and how develop professional communal relationships to facilitate recovery. Many libraries and archives were overwhelmed with recovery efforts, especially as broad infrastructure issues continued to impact recovery in Puerto Rico overall. Various librarians and archivists in the United States stepped in to provide assistance to their colleagues in Puerto Rico and the U.S. Virgin Islands. Miriam Centeno, the collections care coordinator at the University of Illinois Library, spent two weeks at the University of Puerto Rico at Mayaguez Campus Library conducting assessments on the library's facilities and holdings as well as training the library's staff

on how to salvage and stabilize their materials. Her work was supported by a grant from the National Endowment for the Humanities that was granted to the University of Puerto Rico Mayaguez University Library to aid in their recovery efforts (Heckel, 2017). National Heritage Responders deployed to Puerto Rico in December 2017 and January 2018 to aid in recovery and salvage efforts (Lee, 2017; Unger, 2018). The National Association to Promote Library and Information Services to the Latino and Spanish speaking populations (REFORMA) and the ALA also collaborated to form an Adopt a Library Program to match libraries in Puerto Rico that were significantly affected in the aftermath of Hurricane Maria (Tobin, 2018). Climate conditions in Puerto Rico accelerated the process of mold and mildew growth on collections that sustained water damage from Hurricane Maria. The ongoing lack of reliable power on the island also hindered recovery efforts and made stabilizing library materials more difficult (Heckel, 2017; Tobin, 2018). The library at the Humacao campus of the University of Puerto Rico remained one of the most damaged buildings on campus even as classes resumed on October 31<sup>st</sup>, 2017 (Milagros Rodriguez, 2017).

#### Government Funding for Disaster Preparedness and Recovery

One of the more common types of financial backing that a library or archive can pursue is from a government body. Although libraries and archives can receive funding from government agencies, there can be many pitfalls and delays that they encounter during this process that can make them turn away from these options. Potential applicants can find relevant government grants either through funding guides discussed previously

or through the [grant.gov](https://www.grant.gov) site, which shows all grants offered by the United States government (Staines, 2010).

The Federal Emergency Management Agency provides disaster relief funding for individuals and organizations, but it is less commonly pursued as an option by cultural heritage institutions. Significant barriers throughout the FEMA funding application process disincentivize institutions from applying. Before institutions and individuals are eligible to apply for Public Assistance funding from FEMA directly, applicants must first apply and be turned down for both state Public Assistance and a loan from the Small Business Loan Administration. If turned down for FEMA Public Assistance, applicants must first go through regional FEMA offices and then through FEMA headquarters to appeal. (Bawden et al., 2017; Heritage Preservation, 2008). Many cultural heritage institutions find the FEMA Public Assistance application process difficult to navigate and do not complete the process, deciding instead to pursue other funding options (L. Foley, personal communication, September 17, 2019). This is in spite of the fact that libraries were designated as fulfilling an “essential community function” by the Stafford Act amended in 2010 (Robert T. Stafford Disaster Relief and Emergency Assistance Act, 1988). This change in the designation of libraries reflects the role that libraries can play in recovery in the larger community as well.

#### Libraries’ Disaster Recovery and Other Government and Community Institutions

The recovery of a library or archive following a natural disaster can impact how other members of the surrounding community recover from the disaster as well. Local municipal archives can hold property records that are vital for homeowners to access as

they work with their insurance providers to assess damage and relevant coverage from their policy (Dickerson, 2018). The National Network of Libraries of Medicine (NN/LM) has supported public libraries in a variety of ways in their disaster planning and recovery efforts so that the libraries can then go on to assist other members of their community in the aftermath of a disaster. The South Central Region office of NN/LM (NN/LM SCR) found in conversation with their member libraries that communication between public libraries and emergency responders should be improved in order to improve overall community response. NN/LM SCR decided to advocate for public libraries to have a greater role in disaster response on the basis of their ability to: provide information services to disaster victims, provide physical space for disaster victims and emergency responders, and distribute useful information for evacuation or other disaster response purposes (Malizia et al., 2012). In 2018, the New England Region of NN/LM studied the efficacy of resources provided by the Disaster Information Management Research Center of the National Library of Medicine (DIMRC) and how future trainings could be adapted to the needs of staff at member libraries. The study found that institutions with small number of staff serving large user populations had lower staff interest in disaster management training. Most respondents also stated that their institutions did not have disaster plans and that they rarely or never accessed emergency planning resources created by NN/LM or DIMRC. Many respondents also did not have existing relationships with emergency responders in their area and faced technological barriers to accessing online trainings or other resources (Carnes, 2018a). In response to these findings, the NN/LM Outreach Evaluation Resource Center focused their outreach to member libraries on creating: infographics and research guides primarily

for library directors, short video tutorials and self-paced training modules for library staff members and other professional development opportunities geared towards needs identified in the study (Carnes, 2018a).

The Information Use Management & Policy Institute at Florida State University similarly found that public libraries aided in communal disaster recovery and suggested a variety of ways in which public libraries could further aid their communities following a natural disaster. Some of these potential measures were: extending library service hours, becoming a point of distribution for supplies, organize community services and serve as an information mediator between the surrounding community and emergency responders (McClure et al., 2009). It is important to involve a variety of staff members with different professional backgrounds in disaster planning as they will bring their varying professional experience and expertise into problem-solving and prioritization of hazard mitigation strategies. In his 2013 survey, Craig Evans Passley found that archivists and restoration workers prioritized different types of disaster mitigation and recovery training. Archivists and restoration workers also listed different equipment they would prioritize acquiring with archivists favoring equipment that would be used directly on archival materials like microspatulas and restoration workers prioritized equipment use to measure environmental conditions like moisture meters (Passley, 2013).

Given their unique position in the disaster recovery landscape, it is important to study how libraries and archives are able to recover from a natural disaster. The resources that these institutions have can impact not only their own recovery, but how other members of their community recover as well. How libraries and archives obtain financial resources to obtain their recovery is understudied and will be examined in this study.

## Methodology

I have studied archival and library institutions through surveying their staff members. I administered a questionnaire mostly comprised of closed-ended questions with some open-ended questions to library and archival professionals involved in their institutions' disaster recovery process. These individuals could have been members of their institution's disaster planning committee or administrators that determine what grants and other funding options the institution should apply to in order to cover their costs of recovery. They may or not have had degrees in library science, archival studies, or a similar academic program. They also likely have had variable levels of training in grant writing or fundraising; it may or may not have been a regular aspect of their work.

The sampling method I used is best described as convenience sampling. My potential participants were contacted via relevant professional listservs. This method allowed me to address a wide range of professionals whose input could be valuable. Additionally, as this was an exploratory study, generalizability was not an explicit goal. I expected that I would not get many responses from mid-sized or small institutions with this sampling method because staff from these types of institutions often engage in fewer professional development opportunities than do their peers at larger institutions for many reasons, including having less time to engage in these opportunities. A study that focuses exclusively on mid-sized to small institutions would be a fruitful follow-up to this study. Probability based methods of sampling were discounted because there was not a clear way to determine the relevant sample size.

I had initially considered only asking for participants whose institutions were affected a United States federally mandated disaster through my listserv notices or reaching out specifically to institutions that were affected by federally mandated disaster zones. However, I decided not to pursue either sampling option for a variety of reasons. One was I didn't want to burden potential participants by making them determine if the natural disaster their organization experienced was part of a federal disaster declaration; that could make them less likely to participate. I also determined that many institutions could experience disaster that did not fall into federal disaster declaration zones but could have still sustained significant damage.

#### Data Collection Methods

I investigated my research question by administering a survey through Qualtrics. I recruited participants in my study by posting recruitment messages on library and archives listservs with the link to the Qualtrics form. Potential participants were then able to self-select whether they wished to participate in the study. If they proceeded with the study, participants would then click on the link to the survey and fill out the corresponding Qualtrics form.

The recruitment message with link to Qualtrics form was posted on various listservs through the months of December 2019, January 2019, and February 2020. The listservs were: [exlibris-l@indiana.edu](mailto:exlibris-l@indiana.edu), [ncpc-news@googlegroups.com](mailto:ncpc-news@googlegroups.com), [snca-list@googlegroups.com](mailto:snca-list@googlegroups.com), [padg-request@lists.ala.org](mailto:padg-request@lists.ala.org), [medlib-l@list.uvm.edu](mailto:medlib-l@list.uvm.edu), [ncpc-news@googlegroups.com](mailto:ncpc-news@googlegroups.com), and the Society of American Archivist Announcements. The



message was resent to the Society of American Archivist Announcements and [exlibris-1@indiana.edu](mailto:exlibris-1@indiana.edu) listservs in early February.

### Data Analysis Methods

When the window to complete my survey closed, I downloaded an Excel spreadsheet of its results from Qualtrics and used Microsoft Excel primarily to analyze my data. For closed-ended questions, I assigned numerical values to the different choices available for each question and counted the frequencies of each answer choice for the question. I then used this information to generate relevant statistical data about my results.

## Results

A total of 8 responses were received for the survey. 6 of the 8 respondents answered “No” to the screening question and were directed to the end of the survey using skip logic in the design of the Qualtrics survey (Figure 1). The results are not statistically significant.

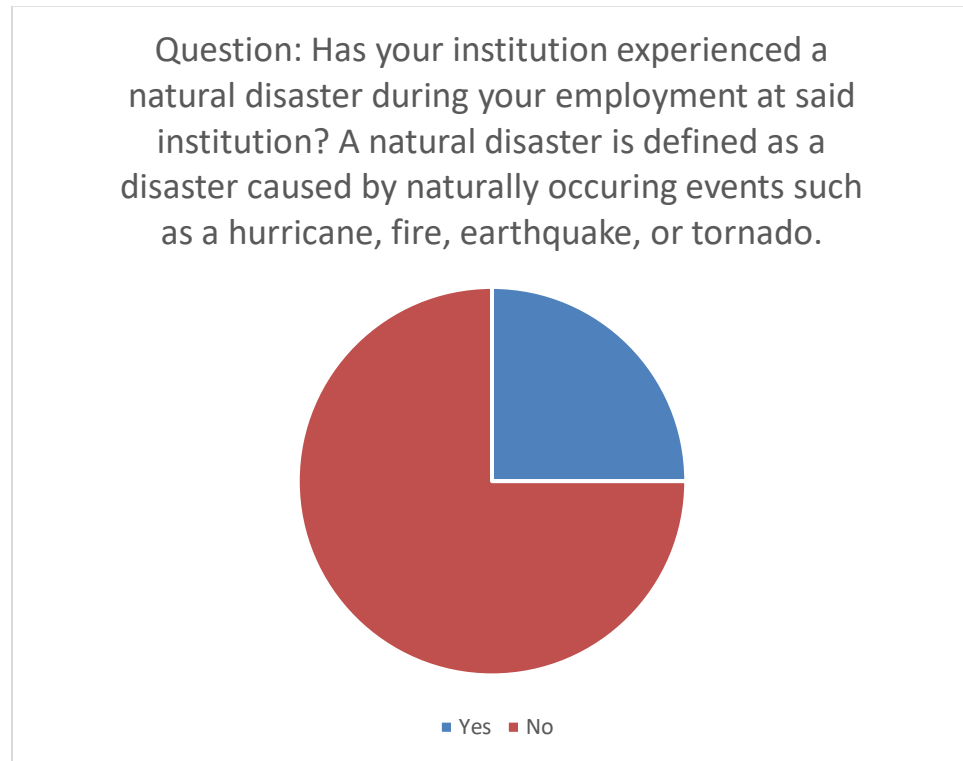


Figure 1: Responses to screening question.

The two respondents who answered “Yes” to the screening question each described water-related incidents at the institutions where they worked. One stated that their institution experienced a “flood due to drain failure during heavy hailstorm.” The other described a “hurricane resulting in basement water leaks.” Neither of the two respondents stated that their institutions sustained more damage than would be covered by insurance and the institution’s budget. Answering “No,” because of skip logic in the survey, brought the remaining respondents to the conclusion of the survey. No respondents answered questions surrounding applying for outside funding.

## Discussion

An impetus for creating this pilot study was to generate generalizable results that would paint a broad picture of what applying for disaster recovery funding was like. Disaster management for libraries in professional literature is often examined as a case study of a specific institution or group of nearby institutions during a single event. While case studies can provide useful information about response and mitigation at other institutions, this study attempted to understand how many different types of libraries experienced one specific aspect of disaster recovery (i.e. funding) while case studies give a sense of the total experience of an institution affected by a disaster. In one Model Memorandum of Understanding endorsed by the National Network of Libraries of Medicine Southeastern/Atlantic Region, a disaster is defined as:

an occurrence such as a hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, earthquake, drought, blizzard, pestilence, famine, fire, explosion, building collapse, transportation wreck, terrorist event, bioterrorist event, pandemic, power failure or other similar natural or man-made incident(s) that causes human suffering or creates human needs that require assistance of hospitals, healthcare personnel as well as the support of libraries in aid of hospitals, healthcare personnel, first responders or public health personnel.

(Brewer & Reich, 2005)

Given the large scope of disasters covered in definitions such as this one, future consideration must be given to how disasters are defined and for what purpose they are defined in future studies.

One aspect of the survey design that should be improved in future research surrounded terminology around disasters and the use of “natural disaster.” The survey asked only for participants who had experienced a natural disaster at their institution to respond to the study. Determining the parameters of what type of disasters would be covered in the survey was challenging, especially as disaster response can vary greatly depending on what type of disaster the institution experienced. I wanted to exclude participants whose institutions had undergone a medical or technological disaster as response to these types of disasters often looks very different from responding to a fire, flood, earthquake, or hurricane. Maintenance related disasters were also in scope for this project, but this was not adequately communicated to participants.

Disasters can encompass fairly straightforward events such as maintenance failures, even if most think only of catastrophic events such as major hurricanes and tornadoes in connection with the term. This is a challenge that should be addressed in future research: that disasters big and small deserve consideration in professional literature. It is worth considering that experiencing small-scale disasters, such as a burst pipe over a few hundred volumes, may be the impetus for an institution to more seriously pursue disaster mitigation and planning. Several grant programs are available to fund disaster mitigation and preparedness projects for libraries, such as the Pre-Disaster Mitigation (PDM) Program from the Federal Emergency Management Agency (FEMA) and the National Leadership Grants from the Institute of Museum and Library Services (Heritage Preservation, 2005b).

None of the participants had to apply for external funding to support disaster recovery at their institution, which was a key aspect of the survey. There are several

possible reasons for this outcome. The librarians who are currently recovering from a disaster at their institution are likely taking on additional duties on top of their normal workloads, reducing their ability to respond to surveys from graduate students. It could also be that, from the way the recruitment email was phrased, that many potential participants chose not to take the survey if their institution did not need to apply for external funding following experiencing a disaster. In future research efforts, it will be important to do stronger outreach with study participants.

## Limitations

The limitations of this pilot study reveal both the limits of survey design and of studying this topic in a generalizable fashion. Because of the use of skip logic, there were two different points in the survey in which participants would be “skipped” to the end of the survey if they gave a particular response. The first use of skip logic in the survey was with the question “Has your institution experienced a natural disaster during your employment at said institution? A natural disaster is defined as a disaster caused by naturally occurring events such as a hurricane, fire, earthquake or tornado.” Participants could either respond “yes” or “no” to this question. If they answered no, they were brought to the end of the survey and thanked for their participation in the study. Since the majority of survey participants answered “no” to this question, they did not get to complete more of the survey. The use of skip logic to enable a more streamlined survey process could be reevaluated in the future so participants are able to answer more questions, in case they misunderstood early questions in the survey.

With my study design, I did not study how institutions change their approaches to obtaining grant funding over time. As discussed previously I anticipate that I did not receive as many responses from staff members at mid-sized or small institutions. Difficulties with recall are another limitation of this study. Since the survey asked participants to answer questions about past events, it is possible that they did not perfectly relate the relevant events that occurred at their institution. This is especially a concern as the staff members that answer the survey may or may not have been directly involved in the grant writing process for disaster recovery funds.

## Future Research

In my survey, I did not ask about preventative care given to holdings or library infrastructure. One avenue of research that could follow this study would examine how libraries and archives do preventative care and how what impact that had if those are later hit by a natural disaster. One other future research topic could investigate if libraries and archives that experience small-scale disasters are more likely to take part in disaster preparedness initiatives than libraries and archives that do not.

In the wake of the COVID-19 pandemic, during which this study was completed, librarians expressed concern about sterilizing circulating library materials upon their return. Researchers could study how and if libraries applied for preservation, disaster mitigation, or disaster response funding for sterilizing library materials.

Future research could also address the use of Memorandum of Understanding and how they are used by libraries and archives. Common between government settings, Memoranda of Understanding are agreements between two or more entities that promise

mutual support, also known as mutual aid, to the other entities in the agreement if they suffer a disaster. This support could be monetary or material. Libraries are increasingly entering into these types of agreements, which would be fruitful to include in future studies of disaster recovery funding for libraries. With this type of financial or material backing, libraries with Memoranda of Understanding may be less likely to need to apply for external funding if they experience a disaster.

## Conclusion

While the wide-ranging nature of natural and man-made disasters make studying disaster recovery a complex proposition, libraries and archives would be better served in disaster management if professional networks had more consensus on what constituted a disaster. Different definitions of disaster are operable for different situations, making studying this topic on a large scale extremely challenging. It remains difficult to grasp how many libraries and archives experience disasters each year, especially as small-scale disasters may be undercounted. The causality of a disaster also plays too large a role in classifying disasters, as was the case in this study.

One must also consider how a variety of disasters can impact libraries and archives. Even if the now-present COVID-19 pandemic is not damaging library facilities or materials, the crisis is undoubtedly having a large effect on how libraries and archives operate and serve their patrons. In the short-term term, libraries are closed to the public and expanding their acquisitions of digital media (Plagman, 2020). Archives' reading rooms are closed to patrons, and archive workers have a limited ability to respond to patron requests as they work from home, away from the largely physical special

collections materials normally ubiquitous in their work. In the long term, many libraries and archives will make difficult decisions regarding funding, especially as enrollment drops at institutions of higher education and government funding for public libraries becomes uncertain (Hartocollis, 2020; Public Library Association, 2020). Budgets will be cut, and many organizations have already instituted indefinite hiring freezes (Flaherty, 2020). With reduced resources and limited access to facilities, library and archive workers will be forced to make difficult decisions about how they can continue to do their jobs while also balancing responsibilities and disruptions in their personal lives. However, the library and the archive continue to be centers of informal and formal learning, recreation, and assistance. They have been able to function because of strong, flexible, and resilient networks of information professionals, willing to undertake unusual challenges like hosting story times over Facebook Live and scanning physical library materials for patrons that are unavailable digitally.

With increased numbers of businesses and other organizations applying for government aid, it has become clear that usually stringent and inflexible requirements for various funding agencies must be relaxed to adequately confront the many crises resulting from COVID-19. The Institute of Museum and Library Services (IMLS) has recently announced that it received \$50 million from the federal government to fund various projects, including those aimed to closing the digital divide and improving equitable access to digital library materials (“Federal Government Invests \$50M in Museums, Libraries to Address Digital Divide During COVID-19,” 2020). They also announced that they would relax requirements for ongoing grant-funded projects and extend deadlines for their next application cycle (“IMLS Authorizes New Grant



Flexibilities for Libraries, Museums,” 2020). Hopefully, the present crisis will force key funding bodies to consider extending many flexibilities instituted for COVID-19 relief in future disasters.

In a time of such complete diminished capacity, access to financial and material resources remain central to disaster or emergency management. It is a simple fact that institutions with greater financial security will weather the tumult better than more insecure ones. Stakeholders in cultural heritage and the information professions should continue to advocate for a greater understanding of how various disasters impact the work of libraries and archives.

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## Appendix A. Recruitment Message

Hello colleagues,

I am writing to you to invite you to participate in my survey about how library and archival professionals apply for disaster recovery funding. I am seeking participants who were staff members at a library or archive that was affected by a natural disaster in the last five years, especially those directly involved in the disaster recovery process for their institution.

The results of this survey will further my research at the School of Library and Information Science at the University of North Carolina at Chapel Hill. It should also inform how various library and archival institutions strategize obtaining disaster relief funding, including but not limited to for facility repair and treatments for library or archival holdings. The results of this survey will be anonymized, and participants will not be referred to by personal identifying information in the discussion of the results.

This survey should take approximately 15-20 minutes to complete.

This study received IRB approval on \_\_\_\_\_. The IRB application number is \_\_\_\_\_.

If you wish to report any ethical concerns you may have about how this study is conducted, you may contact the University of North Carolina at Chapel Hill IRB here:

Thank you for your time and consideration,

Michelle Runyon



## Appendix B. Survey

1. (Screening Question: If participants answer no to this question, they will be directed to the end of the survey with a thank you message for their participation in the study.) Has your institution experienced a natural disaster during your employment at said institution? A natural disaster is defined as a disaster caused by naturally occurring events such as a hurricane, fire, earthquake or tornado.  
(Choices Yes, No)
2. Describe the disaster that your institution experienced. (Open-ended question).
3. How would you best describe the institution you work for? (Choices Academic (post K-12), Public, Government, School (K-12), Other)
4. How would you best describe the library or archive that you work for (not parent institution)? (Choices Small, Medium/Mid-sized, Large, Other: Please describe (free response))
5. In the aftermath of a disaster, did your institution sustain more damage than would be covered by its insurance policy and its then current budget? (Choices Yes, No) (If the participant answers no, they will be directed to the end of the survey).
6. In the aftermath of a disaster, did you and/or other members of your institution apply for funding outside of your department in order to support recovery efforts?  
(Choices: Yes, No)

7. Did you or other staff members at your institution apply for internal funding (grants/other funds provided your parent institution) or external funding (grants/other funds provided by other institutions)? (Choices: Grants/other funds provided by your parent institution; Grants/other funds provided by other institutions).
8. Did your institution have a professional grant writer or another staff member whose explicit duty is to seek out external funding on staff? (Choices: Yes; No)
9. Did your institution hire a contract or temporary grant writer to apply for external funding? (Choices: Yes; No)
10. If you or other staff members at your institution applied for external funding, what funding bodies did you apply to? (Choices are Institute of Museum and Library Services (IMLS); Andrew W. Mellon Foundation; National Historical Publications & Records Commission (NHPRC); National Endowment for the Arts; National Endowment for the Humanities; National Center for Preservation Technology and Training; Public Assistance from your institution's State Government, Small Business Administration; Federal Emergency Management Agency (FEMA); Society of American Archivists (SAA); American Libraries Association (ALA); Other (Allow for participants to select multiple options))
11. Did your institution receive funding after you or other staff members at your institution applied for it at one or more of the above organizations? (Choices are Yes; No)
12. Which organization provided the funding that your institution received to support disaster relief or recovery efforts? (Choices are Institute of Museum and Library

Services (IMLS); Andrew W. Mellon Foundation; National Historical Publications & Records Commission (NHPRC); National Endowment for the Arts; National Endowment for the Humanities; National Center for Preservation Technology and Training; Small Business Administration; Federal Emergency Management Agency (FEMA); Society of American Archivists (SAA); American Libraries Association (ALA); Other (Allow for participants to select multiple options))

13. How did you learn about the grant or funding source that you or other staff members at your institution applied for? (Choices are: Word of mouth from colleagues; Funding guide put out by a professional organization (such as the American Libraries Association or Society of American Archivists); Notice posted to a professional listserv about the grant or funding source; Other)
14. For which reasons did you or other staff members at your institution NOT choose to apply for other grants or external funding opportunities? (Choices are: Lengthy or difficult process by which to receive funding; Institution not eligible for funding under conditions of the grant; Opportunity cost was too high (i.e. would take more staff/other resources to complete the application than the chance of success would warrant); Unable to comply with conditions of the grant, such as unable to meet cost-share requirements; Other)
15. Did you and/or other staff members at your institution discard materials damaged in the natural disaster? (Choices: Yes; No).
16. If you answered yes to the previous question, for what reasons were materials discarded? (Choices: Unable to pay for treatment, Material damaged beyond

repair, Cheaper to acquire newer version of the item than to repair the damaged copy, Not Applicable/Answered No to previous question)

17. Do you feel that your institution received adequate financial resources in order to recover from the disaster that it experienced? (Choices: Yes or No)
18. Is there anything else you wish to share about your institution's experience seeking disaster recovery funding? (Open-response question)